

KEYLATE® BORON (9%)

Material Safety Data Sheet (rev.01/05)

**SECTION I PRODUCT IDENTIFICATION**

|                               |   |
|-------------------------------|---|
|                               | <b>NFPA HAZARD RATINGS</b>  |
|                               | HEALTH HAZARD 1      FIRE HAZARD 0      REACTIVITY 0  |
|                               | <b>SARA/ TITLE III HAZARD CATEGORIES (See Section IX)</b>   |
|                               | Immediate (ACUTE) Health: none      Reactive Hazard: none   |
|                               | Delayed (Chronic) Health: none      Fire Hazard: none      Sudden Release of Pressure: not applic                     |
| Company Name:                 | STOLLER USA, INC.   |
| Address:                      | 4001 W. Sam Houston Parkway, N., Suite 100<br>Houston, Texas 77043-1226 U.S.A.  |
| Emergency Phone Number:       | CHEMTREC: In the U.S. and Canada call Toll- free: 1(800)424-9300<br>From other countries call collect: 1(703)527-3887 |
| Phone Number for Information: | 1(800)539-5283 or 1(713)461-1493  |
| Chemical Family:              | borates   |
| Formula:                      | See SECTION II COMPOSITION/ INGREDIENTS INFORMATION   |
| Trade name & Synonyms:        | <b>KEYLATE® BORON (9%)</b>  |

**SECTION II PHYSICAL AND CHEMICAL CHARACTERISTICS**

| INGREDIENTS:              | CAS#       | Approx. % | TLV  |
|---------------------------|------------|-----------|------|
| Orthoboric Acid           | 10043-35-3 | 53%       | N/ E |
| Dimethyl Aminopropylamine | 109-55-7   | 3%        | N/ E |

**SECTION III PHYSICAL AND CHEMICAL CHARACTERISTICS**

|                             |                                    |                                 |      |
|-----------------------------|------------------------------------|---------------------------------|------|
| <b>BOILING POINT:</b>       | 240°F                              | <b>VAPOR PRESSURE (mm/ Hg):</b> |      |
| <b>MELTING POINT:</b>       | N/ A                               | <b>VAPOR DENSITY (air = 1):</b> | 2.1  |
| <b>SPECIFIC GRAVITY:</b>    | 1.3                                | <b>REACTIVITY IN WATER:</b>     | N/ A |
| <b>SOLUBILITY IN WATER:</b> | 100%                               | <b>EVAPORATION RATE:</b>        | 0.1  |
| <b>APPEARANCE AND ODOR:</b> | Clear blue, thick liquid, no odor. |                                 |      |

**SECTION IV FIRE AND EXPLOSION DATA**

|  |   |             |             |
|--|---|-------------|-------------|
| <b>FLASH POINT:</b>                        | NOT ESTABLISHED                                   |             |             |
| <b>FLAMMABLE LIMITS:</b>                   | NOT ESTABLISHED                                   | <b>LEL:</b> | <b>UEL:</b> |
| <b>EXTINGUISHER MEDIA:</b>                 | Use all means suitable to fight surrounding fire. |             |             |
| <b>SPECIAL FIRE FIGHTING PROCEDURES:</b>   | NONE  |             |             |
| <b>UNUSUAL FIRE AND EXPLOSION HAZARDS:</b> | NONE  |             |             |

**SECTION V****PHYSICAL HAZARDS (REACTIVITY DATA)**

|   |   |
|---|---|
| <b>STABILITY:</b>                           | Stable: Yes      Unstable:  |
| <b>CONDITIONS TO AVOID:</b>                 | Stable under normal conditions.   |
| <b>INCOMPATIBILITY, MATERIALS TO AVOID:</b> | Oxidizing agents and high concentrations of mineral acids.  |
| <b>HAZARDOUS DECOMPOSITION PRODUCTS:</b>    | Carbon Monoxide, Nitrogen Oxide, Carbon Dioxide and Nitric Acid possible in a fire. Ammonia and Hydrogen cyanide under extreme heat as in a fire. |
| <b>MAY OCCUR:</b>                           | <b>WILL NOT OCCUR: X</b>  |

**SECTION VI****HEALTH HAZARDS**

- A. EXPOSURE LIMITS:**  
1. OSHA Permissible Exposure Limit (PEL): NOT ESTABLISHED  
2. Threshold Limit Value (TLV): NOT ESTABLISHED
- B. CARCINOGEN OR POTENTIAL CARCINOGEN:**
- C. EFFECTS OF OVEREXPOSURE:**  
1. **ACUTE:**  
**EYES:** Prolonged exposure to low concentrations of vapors may cause eye irritation and eye damage can occur.  
**SKIN:** May cause malaise, discomfort and injury unless treated promptly.  
**INHALATION:** Prolonged exposure to low concentrations of vapors may cause temporary sore throat and headache.  
**INGESTION:** May cause malaise, nausea, death unless treated promptly.  
2. **CHRONIC:** Chronic test data are not known.
- D. EMERGENCY FIRST AID PROCEDURES:**  
**EYES:** Flush with water for at least 15 minutes. Get medical attention.  
**SKIN:** Wash thoroughly with soap and water.  
**INHALATION:** Move patient to fresh air. Supplemental oxygen may be indicated. Assure mucous does not obstruct airway. Call Physician.  
**INGESTION:** If swallowed, call a physician immediately. Remove stomach contents by gastric suction.
- E. ANIMAL TOXICITY DATA:**  
Oral LD<sub>50</sub> (rat): 905 mg/ Kg  
Inhalation LC<sub>50</sub>(rat):>21 mg/ Lt/1Hr  
Dermal LD<sub>50</sub> (rabbit): 500 - 1070 mg/ Kg

**SECTION VII****SPECIAL PRECAUTIONS & SPILL/ LEAK PROCEDURES**

- HANDLING AND STORAGE:**Keep containers closed and away from oxidizing agents. Store only in shipping container: Bulk material should be stored in Polyethylene Tanks with PVC fittings.
- STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED:** It is necessary to contain spill into the smallest area possible by diking, etc., replace liquid into plastic container. If liquid is absorbed onto dry carrier such as soil or absorbent material, then this material should be put in covered labeled containers and dispose of as a dry waste.
- WASTE DISPOSAL METHODS:** Follow all applicable federal, state and local regulations.

**SECTION VIII****SPECIAL PROTECTION / CONTROL MEASURES**

- RESPIRATORY PROTECTION:** Not specifically required.
- LOCAL EXHAUST:** Provide general or local exhaust ventilation.
- SPECIAL VENTILATION:** Not applicable
- PROTECTIVE GLOVES:** Wear protective gloves and clothing impervious to this material.
- EYE PROTECTION:** Use chemical goggles. Use full- face respirator when there is any likelihood of splashes.
- OTHER SPECIAL CLOTHING/ EQUIPMENT:** Eye wash fountain should be located in immediate work area.

**SECTION IX****ENVIRONMENTAL EFFECTS DATA**

The available data on this plant nutrient material does not indicate any undue hazard to the environment under anticipated use and storage. Any waste due to spillage or leakage should be contained and disposed of as a Fertilizer not to exceed 3 lbs. of actual Boron per acre (see above under Waste Disposal Methods). Due to its nutrient value, may contribute to eutrophication in bodies of water.

**SECTION X****TRANSPORTATION DATA**

**PROPER SHIPPING NAME:** KEYLATE® BORON

**DOT HAZARD CLASS:** Non- Hazardous Material; Non- Regulated Material

**PLACARD:** N/ A

**USDOT Proper Shipping Name:** KEYLATE® BORON

**IATA Proper Shipping Name:** N/ A

**IMO Proper Shipping Name:** N/ A

To aid our customers in complying with regulatory requirements, SARA Title III hazard categories for this product are indicated in Section I. If the word "YES" appears next to any category, this product may be reportable by you under the requirements of 40 CFR Part 370. Please consult those regulations for details.

Stoller Enterprises, Inc., believes the information contained in this material safety data sheet is accurate based on the information supplied by reputable suppliers of our raw materials. The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.